HEAPS, ARNOLD & HEAPS LTD

Manufacturers of Lead, Tin & Solder Products

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MSDS: Metallic Lead

1. IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name: Metallic Lead

Use: Used in the construction industry for roofing, flashing and cladding applications. Used in the casting and extrusion of special lead products such as weights, profiles, strips

Supplier: Heaps, Arnold & Heaps Ltd, Quintec Court, Barbot Hall Industrial Estate, Rotherham, South Yorkshire, S61 4RN. TEL: 01709 837669

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Lead

EU No: 231-100-4

Cas No: 7439-92-1

Content %: >99

3. HAZARDS IDENTIFICATION

Main Hazards: Lead in its solid metallic state would not normally present a hazard. However, Lead is a toxic metal and may present a hazard via Lead fumes when melted and/or from Lead dust. Low concentrations of other various elements will be present, some as alloying constituents, others, as impurities. Oxidation of the surface of the Lead will occur forming a surface layer of Lead compounds.

4. FIRST AID MEASURES

The measures below are unlikely to be relevant whilst Lead is in its solid metallic state. However they are relevant if there is a likelihood of exposure to fumes from melting Lead and Lead dust compounds on the surface caused by oxidation.

Inhalation of Fumes or Dust: Move person to fresh air. Seek medical attention.

Ingestion of Dust: Do not induce vomiting, encourage drinking of water. Seek immediate medical attention.

Eye Contact from Dust: Ensure that any contact lenses are removed from the eyes before rinsing. Irrigate eyes with plenty of water for 5 minutes and seek medical attention if irritation persists.

Skin Contact: Remove potentially contaminated clothing after using Lead products. Wash affected area with soap and water. Lead would not normally irritate the skin. Seek medical attention if irritation persists as it may be due to contact with other substances or chemicals.

5. FIRE-FIGHTING MEAS URES

Extinguishing Media: Non-flammable but molten Lead may ignite adjacent materials. Use Dry powder, CO2 or Foam. Do not use water.

Exposure Hazards: Toxic Fumes may be produced during a fire.

Protection of Firefighters: Wear positive pressure self-contained breathing apparatus and suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection: No special measures required whilst Lead is in its solid metallic state. When melting Lead or cleaning up any Lead spillage protective clothing must be worn, this would include eye protection, gloves and an approved face mask. This precaution also applies if Lead dust is present.

Environmental Precaution: Avoid entry into water courses.

Clean-up Procedures: Spillages should be cleaned and placed in to a sealed container and then sent to a Lead processing company for treatment.

7. HANDLING AND STORAGE

Handling Precautions: Lead is a heavy metal; extreme care should be taken when lifting the material. Follow the guidelines set out in the HSE Manual Handling Regulations. Wear gloves, protective clothing and boots and follow standard personal hygiene procedures.

Storage: Store in a dry area, ensure that the floor loading is not exceeded.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component: TWA Lead 8 Hours 0.15mg/m3

Respiratory Protection: Wear approved face masks when melting Lead or working in the vicinity of Lead dust particles make sure the face mask meets the standard required. Employ mechanical ventilation equipment when melting Lead in enclosed areas.

Hand Protection: Wear suitable gloves.

Eye Protection: Wear safety goggles when melting Lead or lead welding.

Skin Protection: Wear gloves and protective clothing. Follow standard personal hygiene procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Bluish grey soft metal

Melting Temperature: 327°c

Fuming Temperature: 500°c

Density: 11.34g/cm3

Odour: None

Flash Point: N/A

Solubility in Water: Insoluble

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions at low temperature.

Conditions to Avoid: N/A

Materials to Avoid: Ammonium nitrate, chloride triflouride, hydrogen peroxide, potassium, sodium azide, sodium carbide and zirconium.

Hazardous Decomposition Products: Lead is a toxic metal and may produce hazardous fumes when melted.

11. TOXICOLOGICAL INFORMATION

The details below are unlikely to be relevant whilst Lead is in its solid metallic state. However they are relevant when exposed to fumes from melting Lead and Lead compounds on the surface caused by oxidation and from Lead dust.

Inhalation: Prolonged unprotected exposure could lead to various symptoms typical of Lead poisoning although this is extremely rare.

Ingestion: Could cause nausea or abdominal pain. Prolonged exposure could lead to various symptoms typical of Lead poisoning although this is extremely rare.

Skin Contact: Prolonged unprotected contact with Lead could lead to absorption of Lead particles into the blood stream, eventually leading to various symptoms typical of Lead poisoning although this is extremely rare.

Eye Contact: Possible irritation.

12. ECOLOGICAL INFORMATION

Mobility: Not considered mobile whilst Lead is in its solid metallic state. Particles can be dispersed through the air or in water courses.

Degradation: Not biodegradable.

Accumulation: Lead compounds have bioaccumulation potential.

Other Adverse Effects: Lead compounds are toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Waste from Residues: Surplus metal may be returned to Heaps, Arnold & Heaps for recycling. Disposal of compounds must be to a licensed waste collection point, observe any local and national regulations.

Contaminated Packaging: N/A

14. TRANSPORT INFORMATION:

No restrictions on transportation.

15. REGULATORY INFORMATION

Label for Supply: N/A

Text of Risk Phrases Used in Section 2: N/A

Text of Safety Phrases Used in Section 2: N/A

Statutory Instrument: Chemicals (Hazards Information and Packaging) Regulations 2009 SI 716. Control of Substances Hazardous to Health 2002; SI 1000/437. Control of Lead at Work Regulations 2002; SI 2002/2676.

Approved Codes of Practice: Classification and Labelling of Substances and Preparations Dangerous for Supply. The Compilation of Safety Data Sheets (3rd Edition).

Guidance: Occupational Exposure Limits EH40 COSHH Essentials: Easy steps to control chemicals. Control of Substances Hazardous to Health Regulations; HSG193 CHIP for Everyone HSG108.

16. OTHER INFORMATION

The application of the soft metal presents negligible risks providing standard sensible workplace cleanliness is adopted. Working with molten Lead or Lead alloys requires the use of approved eye protection and other recognized personal protection such as approved protective face masks. The appropriate health and safety requirements are defined in the Control of Lead at Work Regulations 2009. It is recommended that a simple workplace risk assessment is made in accordance with the point stated on pages 1, 2 & 5 of the regulations. In general, working with the metal in the open air presents negligible risk providing adequate washing facilities are available at the workplace for hand cleaning. The data contained in this Safety Data Sheet has been supplied as required by the Chemical (Hazard Identification and Packaging) Regulations 2009, as amended, for the purpose of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information. This information is given in good faith, being based on the latest knowledge available to Heaps, Arnold & Heaps. No known relevant information has been omitted from this Material Safety Data Sheet and the information provided is designed to enable the user to use the product safely. The user should not assume on the basis of the information provided in this sheet that the product is suitable for any abnormal use. The company cannot accept liability to any customer, their employees or any other person whatsoever for any loss, injury or damage, whether direct or consequential, which may be caused by any error or omission from this sheet, whether such error or omission is negligent or otherwise. If the information provided is insufficient to ensure safety in any particular application, contact Heaps, Arnold & Heaps for further advice before the proposed application is undertaken.